

EIA-930 Hurricane Irma Impact Tracking Report

Wednesday September 13, 2017, 15:00 hours



For additional information contact:

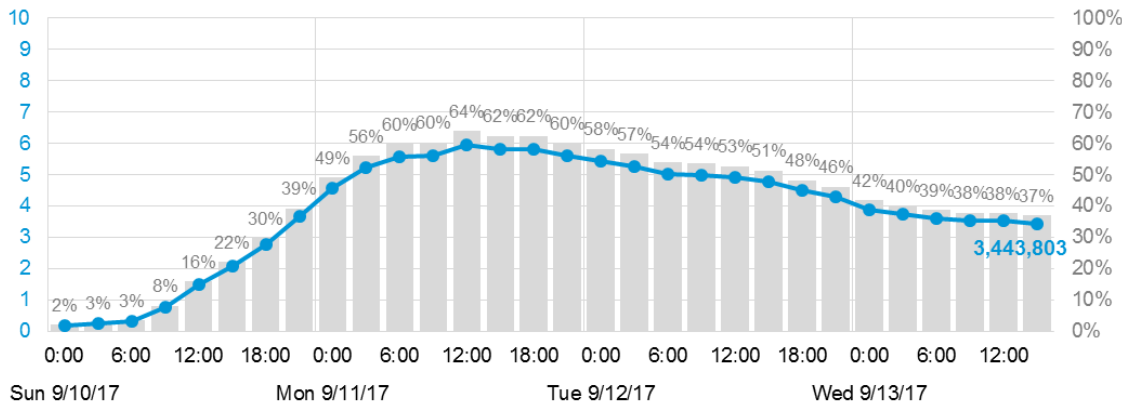
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Florida's Top 10 Utilities by Customer Size

Power Outages

Power outages in Florida's 10 largest utilities (by # of customers)

million customers



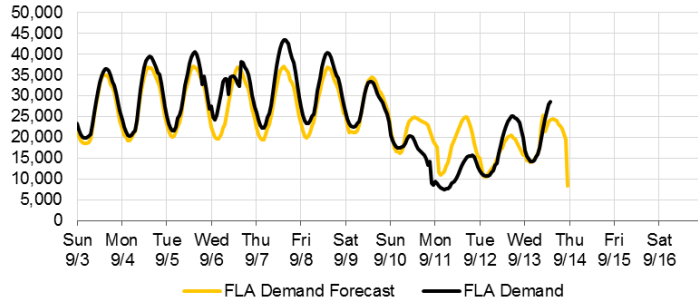
- Power outages in Florida's 10 biggest utilities as of 3 pm Wednesday affected 3.4 million customers—37% of the utilities' customers. Outages have continued to decline steadily since 6 pm Monday.

Source: EIA based on data collected from utility outage websites

Florida Region (FLA)

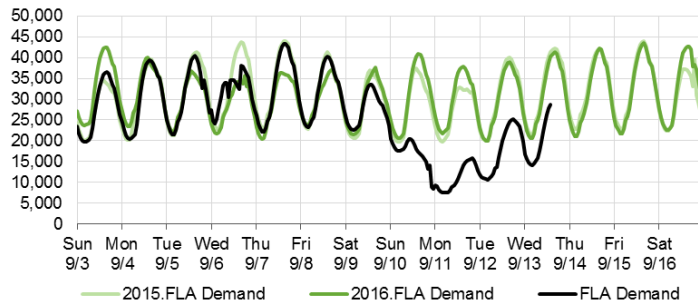
Current demand vs. day-ahead forecast

megawatts



Current demand vs. 2015 and 2016

megawatts (previous years aligned by week number & day of week to 2017 data)

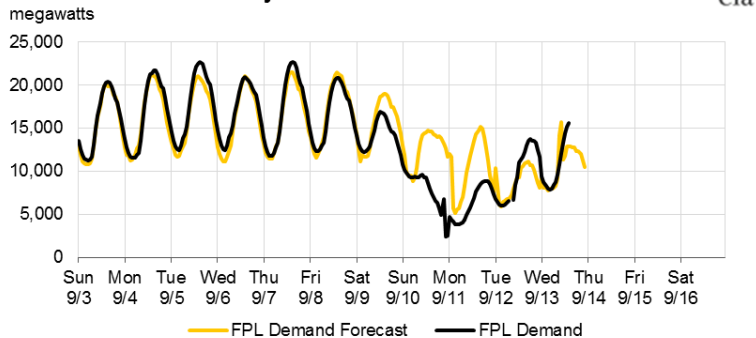


- Aggregate electricity demand for Florida balancing authorities continues to rise after bottoming out early Monday morning. Florida demand neared 29,000 MW Wednesday afternoon after peaking at ~25,200 MW on Tuesday. Peak daily demand exceeded 36,000 MW in the week prior to the hurricane.
- Demand exceeded forecast significantly on both Tuesday and Wednesday afternoons during peak demand periods.

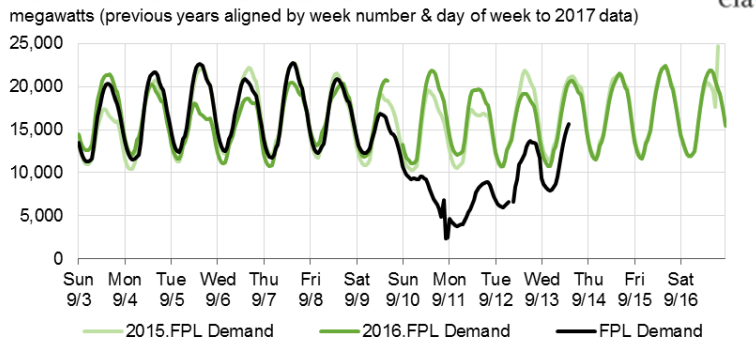
Source: EIA, Hourly and Daily Balancing Authority Operations Report (EIA-930) https://www.eia.gov/beta/realtime_grid

Florida Power & Light Balancing Authority (FPL)

Current demand vs. day-ahead forecast



Current demand vs. 2015 and 2016



FPL is Florida's largest utility serving most of southern Florida and along its east coast (see map on last slide).

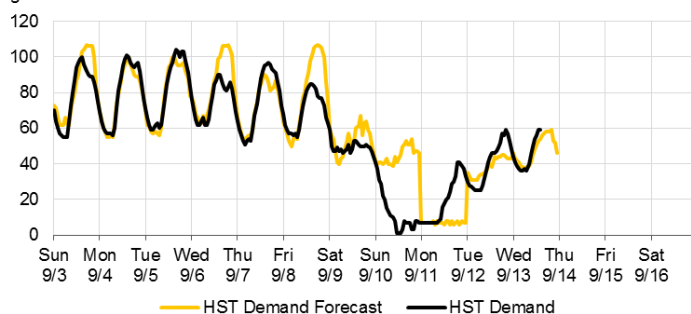
- Electricity demand reached exceeded 15,600 MW Wednesday afternoon. Demand was running significantly higher than forecast Wednesday afternoon.
- Outage updates as of Wednesday afternoon:
Customers impacted: 4.4 million, customers restored: 2.5 million
- FPL expects all East Coast customers “essentially” restored by Sunday, 9/17 and all West Coast customers (south of Tampa) restored by Friday, 9/22 except those pockets with severe damage.

Source: EIA, Hourly and Daily Balancing Authority Operations Report (EIA-930) https://www.eia.gov/beta/realtime_grid

City of Homestead Balancing Authority (HST)

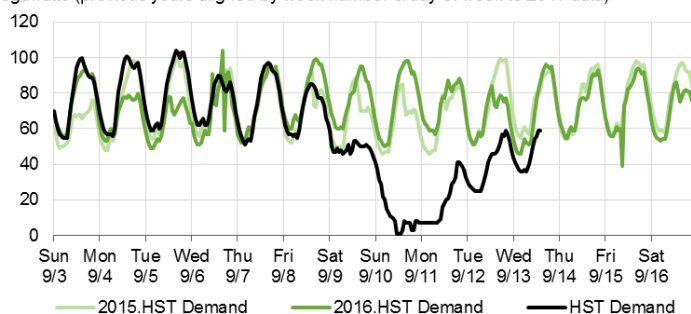
Current demand vs. day-ahead forecast

megawatts



Current demand vs. 2015 and 2016

megawatts (previous years aligned by week number & day of week to 2017 data)



Homestead is located on the southeast coast of Florida and is one of the first U.S. cities and balancing authorities to experience the hurricane.

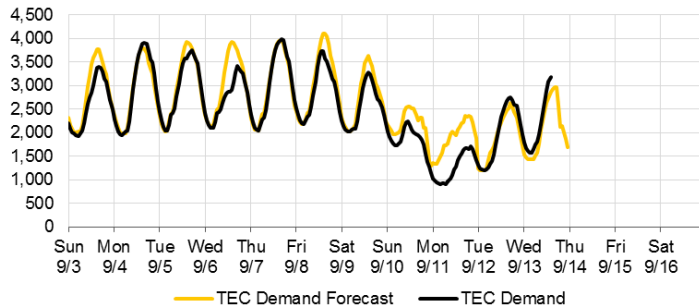
- Demand in Homestead is recovering after dropping to zero around noon Sunday. Demand reached 59 MW Wednesday afternoon, matching Tuesday's peak that was set at 9pm. Demand is still well below pre-hurricane levels.
- Outage update: As of noon today, 60% of customers were restored. All customers should be restored by Sunday, 9/17 though most will get power sooner.

Source: EIA, Hourly and Daily Balancing Authority Operations Report (EIA-930) https://www.eia.gov/beta/realtime_grid

Tampa Electric Balancing Authority (TEC)

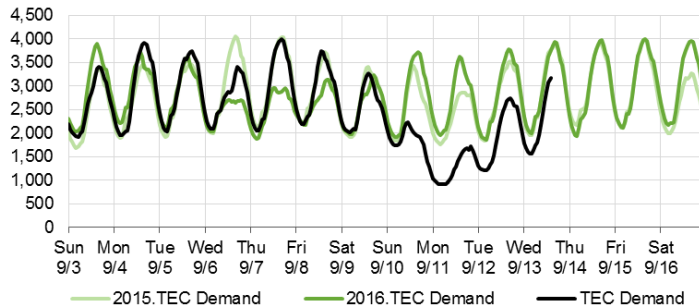
Current demand vs. day-ahead forecast

megawatts



Current demand vs. 2015 and 2016

megawatts (previous years aligned by week number & day of week to 2017 data)



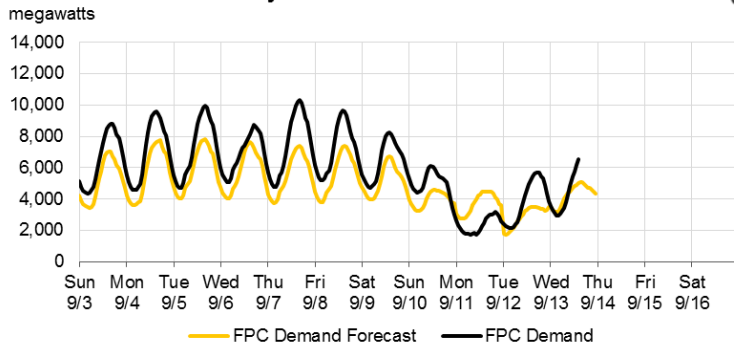
Tampa Electric serves the City of Tampa halfway up the west coast of the Florida peninsula.

- Demand approached 3,200 MW 3pm Wednesday afternoon. This is trending above forecast for the afternoon hours and is above Tuesday's peak demand of ~2,750 MW. Demand levels are now not too far off pre-hurricane levels.
- Outage update: As of Wednesday morning, 53% of TECO's 425,000 customers had service restored, up from 40% at 7pm Tuesday evening.
- TECO announced Tuesday afternoon that they will restore "essentially" all power by Sunday night, 9/17.

Source: EIA, Hourly and Daily Balancing Authority Operations Report (EIA-930) https://www.eia.gov/beta/realtime_grid

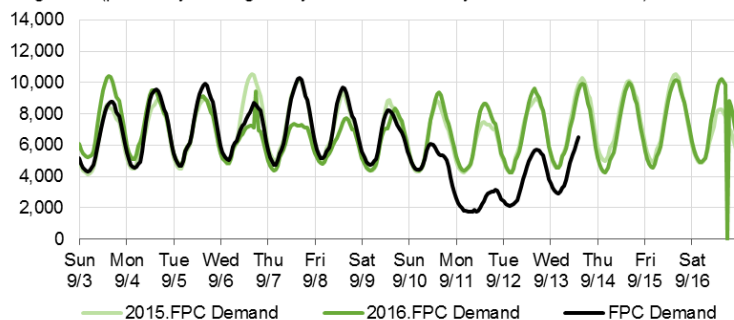
Duke Energy Florida Balancing Authority (FPC)

Current demand vs. day-ahead forecast



Current demand vs. 2015 and 2016

megawatts (previous years aligned by week number & day of week to 2017 data)



Source: EIA, Hourly and Daily Balancing Authority Operations Report (EIA-930) https://www.eia.gov/beta/realtime_grid

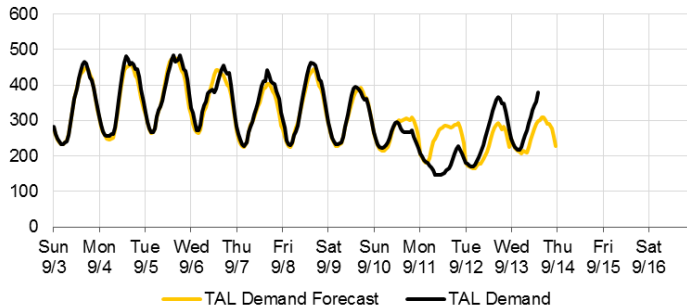
Duke Energy Florida's service territory extends from the center of the state north to the Panhandle on the Gulf side of the state.

- Electricity demand exceeded 6,500 MW 3pm Wednesday afternoon. This is well above Tuesday's ~5,700 MW peak demand and is considerably above forecast.
- Duke Energy crews must replace nearly 3,000 poles and 950 miles of wire across their Florida territory.
- Outage update: As of noon Wednesday, 641,000 customers have been restored, 752,400 customers remain without power.
- Duke Energy announced Tuesday afternoon that it expects to have power restored to most customers by midnight, Sunday, September 17. Two counties south of Orlando were severely impacted and will take longer as the electrical system there is rebuilt.

City of Tallahassee Balancing Authority (TAL)

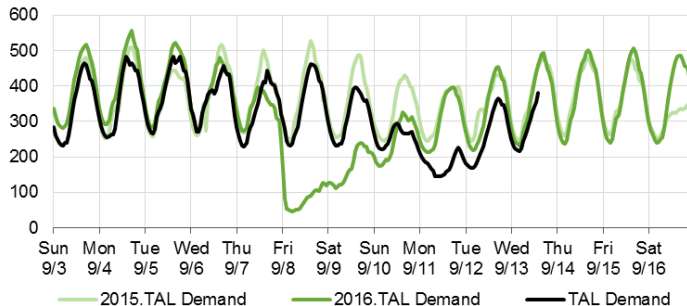
Current demand vs. day-ahead forecast

megawatts



Current demand vs. 2015 and 2016

megawatts (previous years aligned by week number & day of week to 2017 data)



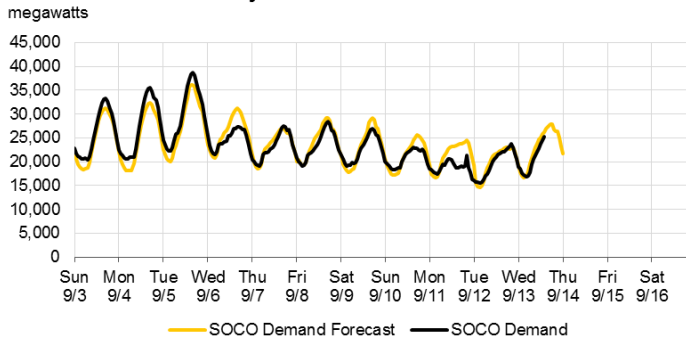
Tallahassee is a municipal utility located in the Florida panhandle.

- Tallahassee demand hit 380 MW 3pm Wednesday afternoon, above Tuesday's 366 MW peak demand.
- Note the demand for 2016. This reflects the direct hit Tallahassee sustained from Hurricane Hermine.
- Outage update: As of 10am Wednesday morning, less than 800 customers remain without power.

Source: EIA, Hourly and Daily Balancing Authority Operations Report (EIA-930) https://www.eia.gov/beta/realtime_grid

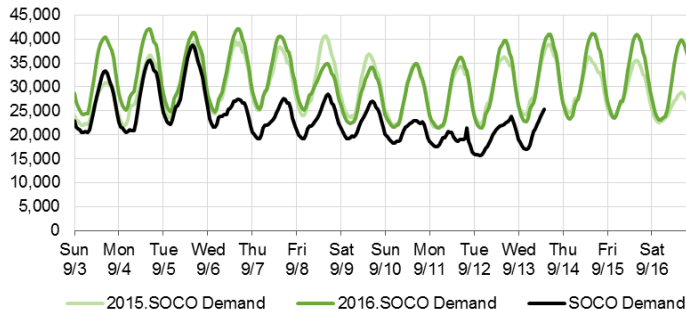
Southern Company Services Balancing Authority (SOCO)

Current demand vs. day-ahead forecast



Current demand vs. 2015 and 2016

megawatts (previous years aligned by week number & day of week to 2017 data)

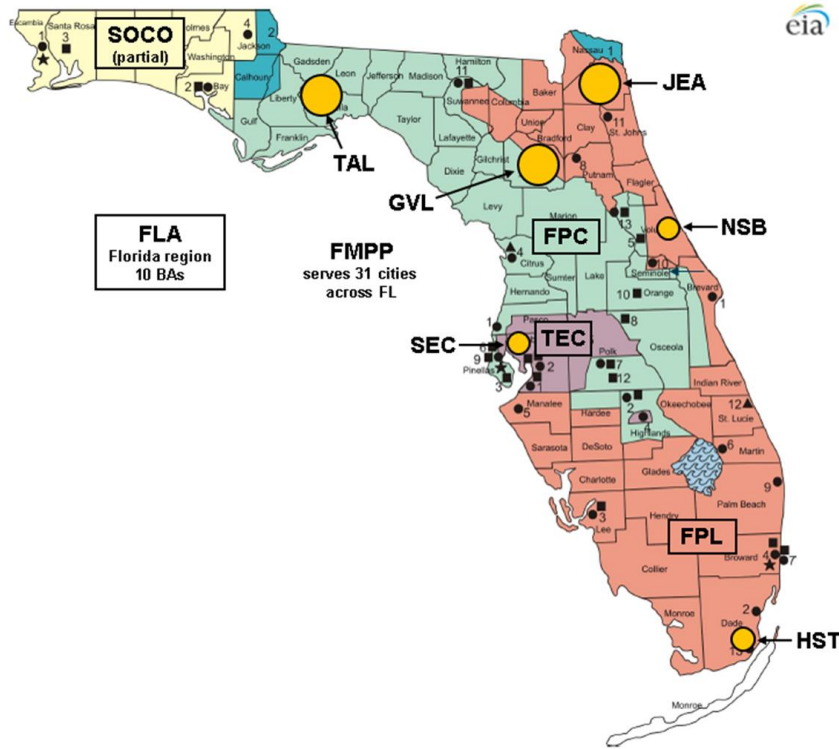


Southern Company and its subsidiaries' territory is expansive, covering much of Georgia, Alabama, Mississippi and part of western Florida.

- SOCO electricity demand is slowly increasing from Monday's lows. Demand was ~25,300 MW 3pm Wednesday, above Tuesday's peak of ~23,800 MW. Demand is running slightly below forecast most of Wednesday.
- Outage update: As of 4pm Wednesday, ~280,000 customers remained without power, most in the metro Atlanta area.
- 95% of customers expected to be restored by Sunday night, 9/17

Source: EIA, Hourly and Daily Balancing Authority Operations Report (EIA-930) https://www.eia.gov/beta/realtime_grid

Balancing Authorities and Utility Service Territories in Florida



- TAL: City of Tallahassee
- JEA: Jacksonville Electric Authority
- GVL: Gainesville Regional Utilities
- NSB: City of New Smyrna Beach
- FPC: Florida Power Corp.
- TEC: Tampa Electric Co.
- SEC: Seminole Electric Cooperative
- FMPP: Florida Municipal Power (serves 31 cities across the state)
- FPL: Florida Power & Light
- HST: City of Homestead
- SOCO: Southern Company (partially in Florida, not included in FLA region total)

Source: Florida Public Service Commission as augmented by EIA